

# Take Action to Protect Your Home and Property from Wildfire

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**G**lobal warming, El Nino, La Nina. Whatever the possible cause, Alabama is going through an extended drought period. For the last three years, each summer and fall has seen significantly reduced rainfall and an increasing number of dangerous wildfires.

## Drought Increases Wildfires

During the year 2000, the continued dry conditions led to a jump in both the number of wildfires and the size and intensity of the fires. Over the last three years, the annual number of wildfires in Alabama has more than doubled (Figures 1 and 2). During the same period, the total acres burned in the state more than tripled.

The drought of 2000 led to a significant number of fires originating from what used to be "minor" causes. For example, in 1999 Alabama experienced only 56 wildfires caused by lightning. During 2000, lightning fires more than quadrupled to 254 fires burning over 10,400 acres. Last summer, Alabama experienced dry lightning storms—thunderstorms where the rain evaporated before it hit the ground. This is usually a Western phenomenon.

The number of wildfires started by children playing also more than doubled, from 58 fires in 1999 to 135 fires in 2000. People burning debris and letting the fire escape has always been a major cause of wildfires in Alabama. Last year the number of escaped debris fires nearly doubled, from 1172 to 1924 wildfires in 2000.

What all these fire causes have in common is that under normal conditions, few incidents of lightning, children playing or people burning debris would lead to a wildfire. However, the drought conditions of the summer of 2000 left the forest so dry that any spark led to a wildfire.

The hard work of the Alabama Forestry Commission and the volunteer fire departments around the state kept the actual acres burned down from the disaster levels they could have reached. The average size fire in Alabama last year

was 13.6 acres. Through hard work, three-quarters of the wildfires in the state were kept to under 10 acres, with 98 percent of the wildfires being less than 100 acres (Figure 3).

These fires had an impact on many

Figure 1

## Wildfires in Alabama 1997-2000

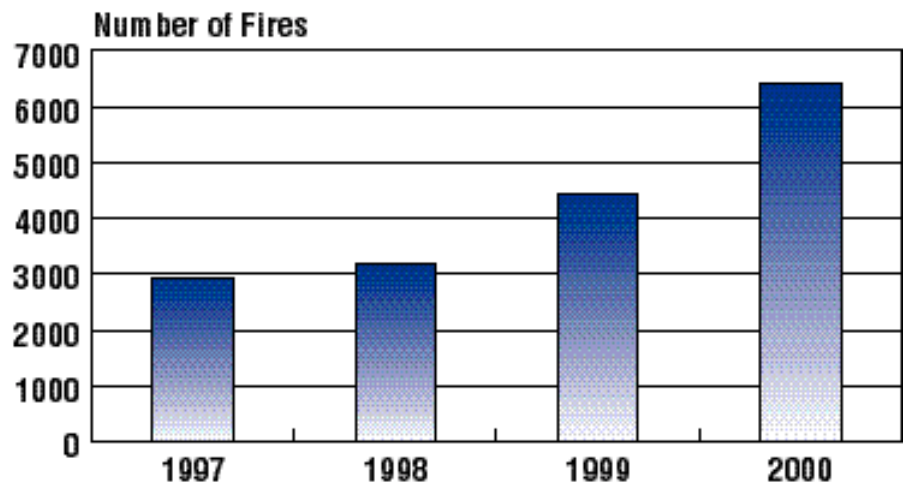
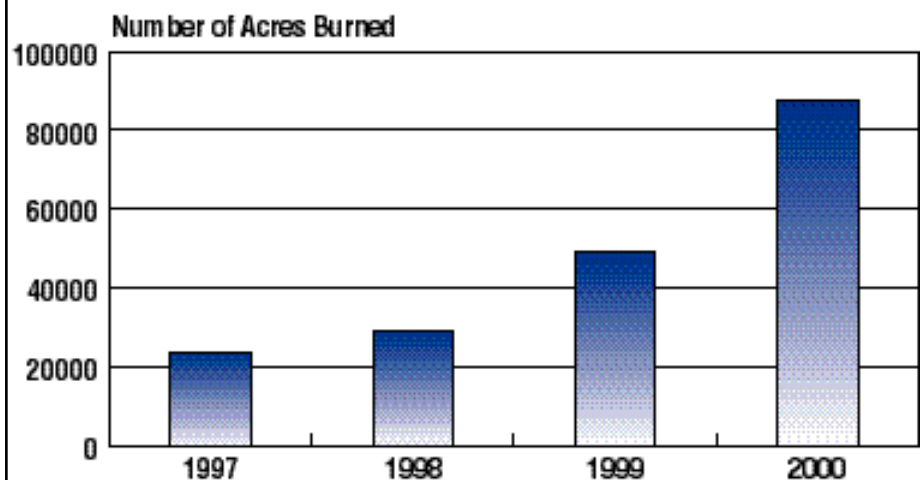


Figure 2

## Acres Burned in Alabama 1997-2000







*Alabama's extended drought has meant increased wildfires across the state.*

Alabama landowners. There was a higher than average loss of pine plantations, with over 33,427 acres burned. Many of these were in 4- to 10-year-old stands, where dryness and winds resulted in almost unstoppable fires that killed most trees. The loss of these investments hit many landowners hard.

The other loss many landowners faced was in hardwood stands, where the dry conditions allowed intense fires to burn in normally wet areas, killing and scarring hardwood trees, resulting in a long-term loss of quality and value in the stand.

## **What's a Landowner to Do?**

A major part of overall forest management is the protection of the investment. With so much treasure in your forest, doesn't it make sense to install some basic protective measures to safeguard your property?

There are three parts to what is called the Fire Triangle: Fuel, Oxygen and Heat (or an ignition source). If all these factors are together, a fire occurs. In wildland fires, oxygen is not a limiting factor, but having fuels and enough heat to dry the fuel and cause ignition are key factors. In hot, dry weather, like in a drought, less heat is needed to start the fire and to get it to grow. Just a spark can do it.

When the Alabama Forestry Commission suppresses a wildfire, the most common method is to remove the fuel using a plowed fireline.

To prevent catastrophic wildfires from damaging your forest, you need to break up the fuels. Landowners can do this using firelanes, plowed and disked trails through the forest that break up the ground fuels into compartments where



*Firelanes help break up the forest so wildfires can be more easily controlled.*

*Continued on page 26*



## Protect Your Home and Property

*Continued from page 25*

any wildfire can be controlled.

Landowners can also thin their stands, which opens up the canopy and slows down any crown fires. Landowners can also reduce or remove heavy brush in the forest. Heavy brush, especially brush covered with pine needles, become fuel ladders, continuous layers of fuel that allow ground level fires to climb up into the crown layer. Here the wind can quickly spread it across the forest, severely damaging and killing trees.

A low-cost method of fuel reduction is to fight fire with fire, using prescribed burning. Prescribed burning is the controlled use of light fires under exacting environmental conditions to achieve management objectives without environmental damage. Prescribed burning will reduce the heavy brush in the forest and also burn up a heavy litter layer so that later any wildfire will be low intensity and burn without seriously damaging the forest resource.

By reducing the fuel loads and the continuity of the fuels in the forest, any landowner can protect his or her investment from catastrophic wildfires. Firelanes, thinnings, brush reduction and prescribed burning are all key insurance practices to protect your forest.

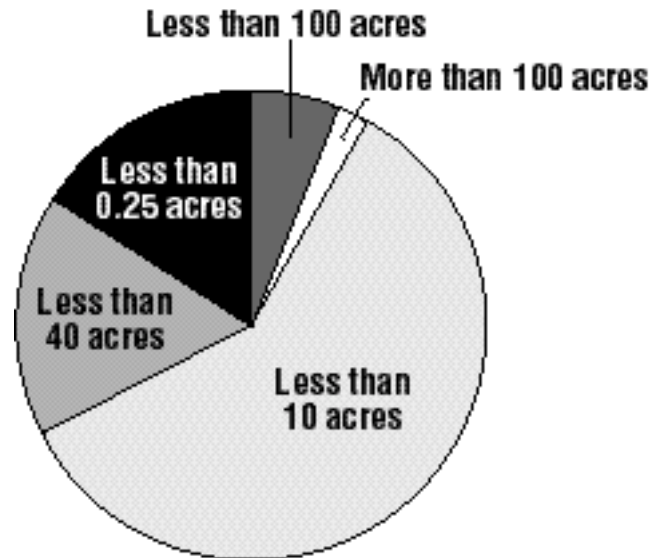
### Protecting Structures on Your Land

Speaking of insurance, one key issue is protecting buildings on your land. During the drought of 2000, landowners in Alabama lost 22 homes and 93 other structures destroyed by wildfires; another 36 homes and 22 structures were damaged by fires. The key factor in these losses was a lack of "defensible space" around these structures. Everyone likes to have his or her cabin in the woods, but there is a need to be able to get firefighting equipment up to the house and keep the wildfire away.

Defensible space means having an area around a structure that prevents a wildfire from burning up to the building and allows firefighters to stop the fire before the building burns. At a minimum, every structure in the woods needs to have 30 feet of open space between it

Figure 3

### Size of Wildfires Calendar Year 2000



and the surrounding forest. This open area can be grassed or kept natural, but it should contain the least amount of flammable materials possible. Homes and decks should be kept away from bluff areas where a fire can burn up beneath the structure. Also, keep flammable liquids away from the structure. Keeping a gas can under the porch can help the porch catch on fire during an emergency. The same goes for pine straw on the roof. One spark, and then the house is on fire. Keep the roof swept off.

Another issue is, can a fire truck get to your house? Many forests have quaint, winding country lanes leading up to the cabin. A fire truck needs a road 15 feet wide and with a 15-foot clearance from low branches. If the fire truck can't get down your driveway, how can they save your house from a wildfire? Many people like to have formal gates where the driveway meets the road. Can a large truck turn into the driveway through the gate? If it's a 10-foot wide gate, a 12-foot wide fire truck won't fit. Again, if the equipment can't get to the cabin, it's awfully hard to save it from fire.

Out in the fields, hay bales are becoming very valuable, and in drought conditions very burnable. Last year over 700 hay bales burned during wildfires, a loss of over \$60,000. If you store hay bales in a pasture, disc around them to keep grass fires away, especially during droughts.

Even though many homes and structures were lost during last year's wildfires, the AFC and local volunteer fire departments worked extremely hard and were able to save 629 homes and 144 other structures as well as 195 hay bales.

A little work on your part can protect your forest and your country home from a devastating loss from wildfire. Isn't it time you insured your TREASURE? 🏠

### REMEMBER

- Construct and maintain firelanes.
- Use prescribed burning to reduce the fuel load in your forest.
- Contact your local office of the Alabama Forestry Commission for more information on firelanes and prescribed burning.
- Clear a defensible space around your home. The area within 5 feet of the house is the most critical for fire protection.
- Avoid using wood shake roofs on woodland homes.